# MR Book Reviews

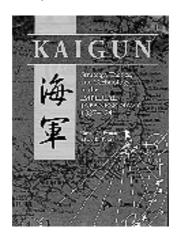
KAIGUN: Strategy, Tactics, and Technology in the Imperial Japanese Navy 1887-1941 by David C. Evans and Mark R. Peattie. 696 pages. Naval Institute Press, Annapolis, MD. 1997. \$49.95.

Kaigun: Strategy, Tactics and Technology in the Imperial Japanese Navy, 1887-1941 is an exhaustive and elaborate examination of the Imperial Japanese Navy before the Pacific War. Its primary focus is on the period from 1904 to 1941. The authors adopt three analytic perspectives—technology, strategy and tactics. Their stated purpose is to explain the sources of the navy's triumphs and defeat, how the navy thought about war at sea and how it prepared for war.

David Evans and Mark Peattie brought excellent qualifications to the task and faced formidable obstacles, including the relative lack of vital records and the difficulty the Japanese language presented. Many of the records were destroyed between 15 August 1945, when Japan accepted the Potsdam Declaration, and 30 August 1945, which marked the beginning of the Occupation.

The authors present the Japanese navy as an institution faced with the reality of rapid technological change, tactical confusion and considerations of quality as opposed to quantity. That the Japanese were not alone in this dilemma did not make it any easier for them, or anyone else, to solve. The navy's formative doctri-

nal experience derived from its victories in the 1894 to 1895 Sino-Japanese War and the 1904 to 1905 Russo-Japanese War as well as from its study of the 1916 Battle of



Jutland. In the two former conflicts, the Japanese emerged as victors by fighting and defeating larger and better-armed foes. The lessons the navy derived from this experience led it to advocate a semi-mystical approach to naval combat backed by extensive and rigorous training and drill. Just like the world's other professional naval officers, the Japanese ignored the commerce-raiding lessons provided by the German U-boats and the convoy countermeasures instituted by the Royal Navy in World War I.

The Japanese navy did take several ideas from its experiences between 1894 and 1918. It believed,

based on its own and received wisdom, that the great naval battle at sea was the essence of naval warfare. In addition, it came to believe that this decisive fleet engagement would be determined by big guns. Their experience also validated the idea that an attrition strategy was appropriate against a numerically superior foe. At the same time, they believed that quality was to be preferred to quantify in naval weapon systems. Tactically, their experience stressed the importance of night actions, especially nighttime torpedo tactics.

The Japanese navy entered the era of naval limitation with the two other great naval powers, the United States and Great Britain, ceding local naval superiority to it. With the ratios negotiated in 1922 in Washington and in 1930 in London, the Japanese were the paramount naval power in the Western Pacific. However, the logic of Japanese imperialism in the 1930s, the threat of war with the United States and the conduct of the war in Europe from 1939 to 1940, convinced the navy it must prepare for war with the Americans. In fact, between 1904 and the 1930s, American and Japanese war plans and tactics were developed specifically to counter the plans and tactics of the other. The Japanese and American navies slowly emerge as analogues of each other.

The governing feature of armynavy relations in Japan was fierce interservice rivalry. Unlike the American version, the Japanese did not even share basic information, and sister services could come to no agreement on strategic collaboration.

Aside from war plans and strategy, the authors also make a cursory examination of naval aviation, naval construction and collateral naval elements, merchant marine subsidies, logistics, personnel policies, scientific research and naval intelligence. They examine these areas and find navy shortcomings stem from mistaken strategic calculations and the narrowness of Japanese industrialization and Japan's relative poverty.

The book concludes with a brief examination of the conduct of the Japanese navy in the Pacific War, which was superlative. The underlying problems were strategic and doctrinal. By the mid-1930s, Japanese fleet doctrine depended on weapon systems that were either unproven as concepts or untested. The conduct of the war itself illustrated the disconnect between the war the navy planned to fight and the war it actually fought. The Japanese navy's basic strategic mistake was to fight a protracted war over great distances without having the means to hold positions in depth and the strength and the means to support the forces it committed. Fighting the decisive battle became an obsession with the navy hierarchy, and it became an end unto itself. For the US Navy, on the other hand, the decisive battle was seen merely as a means to winning the war. Its strategy was blockade of the Japanese home islands and the slow economic strangulation of Japan.

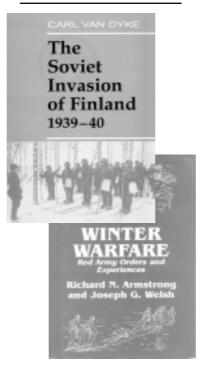
Both sides read the historical record and drew different conclusions. The Japanese became obsessed with their own victories in the Battles of the Yalu and Tsu-shima as well as the Jutland engagement. While the US Navy was also interested in Jutland, it was able to draw on its Naval College war games over the Pacific based on Mahanian ideas and its own history in the Civil War and the War of 1812.

Although long and on a naval subject, the book should be read by Army officers. It gives a complete and nuanced view of the way an important military institution changed

in an age of tactical and technological uncertainty.

> Lewis Bernstein, Combined Arms Center History Office, Fort Leavenworth, Kansas

Editors note: The Society for Military History has just announced that David C. Evans and Mark R. Peattie have won the society's 1998 Distinguished Book Award for Kaigun: Strategy, Tactics, and Technology in the Imperial Japanese Navy 1887-1941.



THE SOVIET INVASION OF FINLAND, 1939-40 by Carl Van Dyke. 270 pages. Frank Cass and Company, Portland, OR. 1997. \$24.95.

WINTER WARFARE: Red Army Orders and Experiences edited by Richard N. Armstrong and Joseph G. Welsh. 190 pages. Frank Cass and Company, Portland, OR. 1997. \$45.00.

The current availability of Sovietera archives has generated a wave of reassessment of Russia's role in many 20th-century events. One area, the Red Army's operations during the 1939-1940 Soviet-Finnish War known as the "Winter War," has been viewed by many historians as one of the critical events that shaped the course of events in 1940-1941.

In *The Soviet Invasion of Finland*, Carl Van Dyke uses the archives to examine the Soviet military's role during the Winter War in terms of Joseph Stalin's national security policies, the Red Army's actual battlefield performance and the lessons the Soviet high command examined after the war. However, what initially promised to be a welcome reexamination of this interesting period quickly becomes a case of missed opportunity.

My disappointment began with the preface. Van Dyke states his book would address the question of "what motivated Stalin's invasion of Finland." While the book offers an acceptable overview of the events that transpired during the period leading to the war, it never answers this question.

Van Dyke presents a clear picture of the miscommunications and erroneous assumptions both sides made during negotiations, but I never gained an appreciation of whether Finland posed a legitimate military threat to the Soviet Union. Did Stalin have reason for concern? Or was his drive for buffer states comparable to Germany's drive for lebensraum? What is lacking is a military assessment of the situation and Van Dyke's analysis of the information to ferret out the Soviet Union's genuine concerns or desires. He finally addresses some of these issues in his epilogue, but this makes the book feel disjointed as this new discussion properly belongs in the first chapter. I do not presume to think that historians will fully explain Stalin's drive for war, but Van Dyke does not interlace this discussion with the events that led to war.

From reading the early chapters, I knew Van dyke had access to a wealth of new material detailing the battles from the Soviet perspective. While he glosses over many of the war's better-known events, he gives only a tantalizing glimpse of what is available. For instance, this is the first book I have read that discusses in any detail the Mannerheim Line and the Red Army's assault on it. Van Dyke provides a diagram of a Mannerheim Line bunker, details of the methodology the Red Army developed for its second assault on the line and a map that portrays a small section of the line. Through his narrative, I understood that the Finns' inability to continue resistance was based more on the Red Army correcting and improving its combat techniques than its reliance on brute force. I was hooked and wanted more, but there was too little to be had.

In all, the chapters covering the war suffer from uneven levels of detail that make the campaign's flow difficult to understand. The reader is also hindered by maps that add little to understanding but succeed in making the book difficult to read. Lessons learned are presented in a de facto manner, with the process receiving the greater amount of attention over the lessons. However, Van Dyke successfully conveys that the Red Army made a significant effort to learn from mistakes and aggressively implement solutions both during and after the war.

Overall, this book is enjoyable, especially when Van Dyke uses the vast archive sources to paint the events, then offers a balanced discussion to explain what happened. Too often, however, I felt that the author was limited by time or word count in preparing this book. There is never enough detail presented to mentally picture this war, and a reader might never grasp the scope of the Red Army's defeats that became the catalyst for their subsequent success. I can recommend this book for the serious student of the Winter War for the several insights provided, but the general reader should stay with the standard volumes covering the war.

Winter Warfare, by Richard N. Armstrong and Joseph G. Welsh, picks up where Van Dyke's book ends. This book is a translation of material from two Soviet sources: Part 1, the Red Army's 1941 manual on winter warfare, incorporates the lessons learned in the Winter War. (Van Dyke discusses this manual in the third part of his book.) Part 2 is a collection of lessons learned from after-action reports written during the winter battles of 1941-1942 against the Germans. Both parts of the book offer insights in how the Red Army conducted winter operations. However, do not expect any discussions of value covering actual operations; there are none. Both parts are written in a how-to style and do not address, in any detail, the events on which they are based.

The best part of this book is the introduction. Armstrong does an excellent job in providing a concise lead-in on winter warfare for the translations. In fact, I first thought that the introduction itself had been translated from the 1941 manual; it blends beautifully with Part 1. Beyond the introduction, there is little for the general reader. The specialist on winter operations will find this book of interest.

While I understand this review is somewhat negative, I applaud the efforts of Frank Cass and Company for publishing these books, which are part of a series addressing Soviet military operations between 1939 and 1945. There is more Soviet military history waiting to be published, and I hope Frank Cass and Company will continue to make it available to the public.

LTC Jeff Leser, USA, CAC Plans, Fort Leavenworth, Kansas

### THE COMING CONFLICT WITH

CHINA by Richard Bernstein and Ross H. Munro. 245 pages. Alfred A. Knopf, New York. 1997. \$23.00.

At its heart, *The Coming Conflict with China* is a book about change—China's and the United States' shifting attitudes and positions. The authors conclude that the change has not been good for the United States.

China's attitude toward the United States has shifted from one of basic friendship to a recognition of the United States as a threat to China's position in Asia and the world. Two major factors led to this shift. One was the Persian Gulf conflict, which brought home to China the fact that the United States outclassed the competition in military equipment and tactics. The other was the warming of the relationship between China and Russia. China's need for US friendship is greatly reduced by an improved relationship with Russia.

China has also become more aggressive toward the rest of Asia—seizing the Paracel Islands and Mischief Reef, attacking across the Vietnamese border and sinking ships in the Spratleys area. China has also successfully moved its industrial base from low-technology, labor-intensive industries to high-technology industries with greater profit margins.

In the next several years, China's economic output will overtake Japan's. China's foreign exchange reserves are some of the largest in the world—over \$90 billion in 1996.

US policy toward China has been ineffective. About one-third of China's exports come to the United States, yet the United States fails to use its purchasing power to change Chinese policy. China uses the money it collects from the enormous imbalance of trade with the US to finance the modernization of its military. US firms attempting to garner more Chinese business have transferred huge amounts of military technology to China.

The authors, both international journalists, present an economic solution to the problems of US relations with China that is largely based on a gradual reduction of the \$40 billion trade deficit. They also recommend unlinking human rights and economics while maintaining a relationship, albeit a formal one, with the Chinese government. Thanks largely to American largesse, China's economy has become world-class. Whether this will come back to haunt the United States, only time will tell. The conclusion is that China has benefited from trade and investment ties with the United States while simultaneously preparing to confront the United States militarily and politically.

Each chapter reads like a magazine article, which is what one would expect from journalists. Still, the statistics cited are adequate to support the work's basic points. The book is not without its flaws, but for a quick overview of the China situation and a realistic look at the reality of Sino-American relations, it is worth a look.

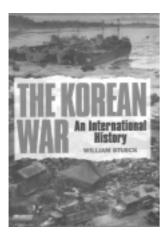
MAJ Gary D. Brown, USAF, US Strategic Command, Offutt Air Force Base, Nebraska

**THE KOREAN WAR:** An International History by William Stueck. 484 pages. Princeton University Press, NJ. 1997. \$18.95.

William Stueck suggests that the "police action" in Korea between 1950 and 1953 served the earth as a surrogate for World War III. The world's two superpowers, the United States and the Soviet Union, success-

fully avoided the potentially fatal error of facing each other directly on the battlefield by containing the conflict, in terms of geography, to Korea. In terms of the physical act of war, the conflict included a relatively small number of nations and national forces because it was in the world's best interest not to replay World War II.

The Korea conflict was not the first war that featured international



combatant coalitions aligned against one another. However, it was the first example of a conflict sponsored by an international organization such as the United Nations and the first, in America's experience, that included limited-objective warfare. In this case, the United States initially sought something less than total victory.

Stueck focuses on the war's international dimensions in an exceptionally effective way as he describes the seemingly constant friction between coalition members on both sides. The give and take of international diplomacy presented a pronounced challenge for the United States as it attempted to gain its geopolitical and military goals through the United Nations. At the same time, to take the actions they desired, Korean and Chinese leaders were forced to consult with, solicit material assistance from and sometimes request permission from Joseph Stalin.

Stueck's information is characterized by six interlocking themes:

- The war's multilateral nature.
- The UN's role in the conflict.
- Individual nations' reasons for participating in the war.
  - The conflict's global impact.
- The military buildup that resulted in significant political and economic consequences to both

superpowers.

• The assertion that both principals had many opportunities to control the larger historical effects of the war.

A thoughtful extension of these themes carried forward to the 1990s should lead the reader to conclude that the seeds for the Soviet Union's demise, the United States' ascendancy to its status as the world's sole superpower and the People's Republic of China's military and economic awakening were sewn as a consequence of this war.

Stueck shows the conflict's origins to be the World War II Allies' failure to fully consider the future of nations occupied jointly by Soviet forces and their allies. Also, Stalin's paranoid mistrust of the United States and a naive American world perspective deprived the principals of communication avenues that could have prevented the conflict. US frustration with UN members who sought to attain concessions that were in their individual self-interests is also quite clear. Whether the goal was to acquire economic aid, achieve treaty status or merely thumb a nose at a more powerful ally, countries generally operated first in their national interest. This lesson should not be lost on contemporary politicians, military leaders and citizens.

Whereas most books on the Korean War focus on the conflict's military aspects, *The Korean War* considers the geopolitical component of that period in US history. I view the book as a valuable tool to gaining an understanding of why the events leading to and during the Korean War occurred as they did. This would be an outstanding textbook for a university political science course or as a resource for intermediate- or senior-level military educational courses.

COL Robert A. Gimbert, USA, Retired, Georgetown, Texas

#### THE MILITARY AND CON-FLICT BETWEEN CULTURES:

**Soldiers at the Interface** edited by James C. Bradford. 233 pages. Texas A&M University Press, College Station, TX. 1997. \$37.95.

As outlined in its introduction, *The Military and Conflict Between Cultures* attempts to make the case that "cross-cultural *res militariae* studies have 'real-world' importance." However, some of the essays

presented succeed far better than others in validating this argument.

Based on a collection of scholarly papers submitted in support of a symposium dealing with crosscultural conflicts, this book attempts to illustrate how differences between diverse cultures relate to military conflict. Edited by well-regarded military historian James C. Bradford, this book's nine essays span a vast historical timeline in promoting such widely divergent theories as how economic geography and military topography dictated the fighting style of armies in ancient times to the role General Douglas Mac-Arthur's stature had in deciding his choice of a mistress during his third tour of duty in the Philippines.

As previously stated, certain essays in this collection pass the test of "real-world" relevancy far better than others. Particularly noteworthy



is an essay by Robert M. Utley, an eminent and prolific American West author who, appropriately, deals with the military implications of the cultural differences between Native Americans and the US Army. Another pertinent essay, by John W. Bailey, outlines the vast differences in the perception that Indian Warsera military commanders had of their duty in respect to how they conducted their campaigns against the Native Americans.

Other essays do not hold up well against the scrutiny of either historical or military relevancy. One such essay, by Carol Morris Petillo, begins with an excellent idea of examining the intercultural perceptions and misperceptions that resulted between Americans and Filipinos from 1898 to 1946. Initially, Petillo presents

some interesting theories and supports them with valid evidence. However, she eventually undermines her credibility when she attempts to inject Freudian methodology into the examination of the lives of such major American military generals as John J. Pershing, Leonard Wood and MacArthur, all of whom served in the Philippines early in their respective careers. (If this analytical style becomes popular, the comic possibilities of military figures being pseudo-analyzed by future armchair clinicians are endless—"Clausewitz! What did he really mean by the center of gravity?"

Like most academic tomes, this collection too often gives the appearance of having been written for academics by academics, which seriously devalues this book's potential usefulness to "real-world" practi-

tioners. In the preface and introduction, the editor makes only a cursory effort to explain these essays and does little to draw some sense out of the final summation. If this volume is intended for an audience of likeminded academics, it succeeds. If it is intended, as its introduction states, for use by "real-world" practitioners, it succeeds far less than it should.

1LT Gene J. Del Bianco, USA, A/2/19th Special Forces Group, Fort Campbell, Kentucky

STONEWALL OF THE WEST: Patrick Cleburne & the Civil War by Craig L. Symonds. 322 pages. University Press of Kansas, Lawrence, KS. 1997. \$34.95.

Patrick Cleburne's legacy has suffered because his service was in the Western Theater of the Civil War and from his death in the tactically flawed November 1864 attack at

Franklin, Tennessee. He has, unfortunately, as author Craig L. Symonds points out, remained a little-known figure in campaigns dominated by Union generals Ulysses S. Grant and William Tecumseh Sherman and by Confederate generals such as the enigmatic Braxton Bragg and the fatally daring John Bell Hood. Cleburne's status has been further lessened by his service as a division commander rather than as a more prestigious corps commander. Nevertheless, this is a highly insightful analysis of Cleburne, who Jefferson Davis dubbed "Stonewall of the West.'

While the title of the book is "catchy," the accuracy is another matter. Symonds makes two points continually. First, foreign-born Cleburne was not a West Point graduate, and he participated in the near-mutiny of senior officers

## Pass in Review

ALEXANDER WILLIAM DONIPHAN: Portrait of a Missouri Moderate by Roger D. Launius. 316 pages. University of Missouri Press: Columbia, MO. 1997. \$37.50.

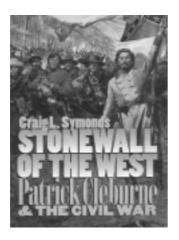
GERMAN KNIGHTS OF THE AIR: 1914-1918: The Holders of the *Orden Pour le Merite* by Terry C. Treadwell and Alan C. Wood. 208 pages. Brassey's, Washington, DC. 1997. \$28.00.

WE WILL NOT BE STRANGERS: Korean War Letters Between a M.A.S.H. Surgeon and His Wife edited by Dorothy Horwitz. 273 pages. University of Illinois Press, Urbana, IL. 1997. \$26.95. This competent biography of Alexander William Doniphan paints the picture of a unique 19th-century life. Doniphan had success as a lawyer, regimental commander of Missouri volunteers and moderate politician and unionist. The middle part of the book, dealing with Doniphan's expedition with General Stephen Watts Kearny's Army of the West in the Mexican War, is of most interest to the military reader. Launius takes an aggressive but supportable stand on volunteers' usefulness in warfare before the Civil War.—CPT Todd Laughman, USAF, On-Site Inspection Agency/IOSM, Dulles, Virginia

The *Pour le Mérite*, or "Blue Max," was the highest decoration that could be awarded to a pilot in the Imperial German Armed Forces in World War I. In *German Knights of the Air*, the authors compile short biographies and photographs of all 81 recipients. Following an excellent historical introduction, the authors do a commendable job of providing the fundamental biographical sketches of these legendary men. Excellent photographs, including a gruesome shot of a dead Manfred von Richthofen, add to the book's historical authenticity and effect. An incomplete bibliography and lack of citation leave the researcher wanting, but this book is a must for World War I and aviation history buffs.—LTC Tony Kern, *USAF*, *Director of Military History*, *USAFA*, *Colorado* 

Most of us in the military face intermittent separations from our loved ones. We often struggle with maintaining those relationships long-distance. In this collection of letters between a newly married surgeon and his spouse, we see an excellent example of how to maintain and improve our relationships during trying times. Dorothy and Mel Horwitz shared their thoughts and feelings about everyday activities, expressed their affections and confessed personal fears and failings. Because they were also enthusiastic readers, their review of dozens of books challenges us to expand our own reading lists. This book will not interest everyone, but for the lessons to maintaining a relationship over distance, it is well worth the time.—COL Gale Pollock, AN, Alexandria, Virginia

against Bragg. Neither of these issues would engulf the "Stonewall of the East"—Thomas J. "Stonewall"



Jackson—a native-born West Pointer who never gave any indication of disagreement with General Robert E. Lee.

Cleburne was limited to what he could accomplish militarily by his level of command, the number of soldiers available and the audacity of his superiors. He was superb in the defensive battle but, unlike Jackson, seldom had the opportunity for the surprise envelopment that Jackson often used to smash unsuspecting Union commanders. When he did have the opportunity, such as at the battles of Atlanta and Spring Hill, Georgia, the attacks were mismanaged and failed to accomplish the objectives.

Symonds provides one littleknown fact about Cleburne—his proposal to arm slaves to defend the South, which was so radical that even his fellow division commanders could not support it. The author concludes that this may have been another reason why Cleburne did not rise beyond division command.

Symonds portrays Cleburne as a soldier who was brave beyond measure, cared for his men and believed in his cause. *Stonewall of the West* is meticulously researched, with the exception of Symonds' assertion that Arkansas Post fell without firing a shot, and is highly readable.

LTC RICHARD L. KIPER, USA, Retired, Leavenworth, Kansas

**BLOOD AND WATER: Sabotaging Hitler's Bomb** by Dan Kurzman, 288 pages. Henry Holt and Company, New York. 1996. \$27.50.

Blood and Water, by Dan Kurzman, tells the gripping story of the Allied effort to destroy the Vermok, Norway, Norsk Hydro heavy water plant during World War II. Heavy water (deuterium oxide), one of the critical

CARRIER CLASH: The Invasion of Guadalcanal & the Battle of the Eastern Solomons by Eric Hammel. 358 pages. Pacifica Press, Pacifica, CA. 1997. \$29.95.

A HUNDRED MILES OF BAD ROAD: An Armored Cavalryman in Vietnam, 1967-68, by Dwight W. Birdwell and Keith William Nolan. 218 pages. Presidio Press, Novato, CA. 1997. \$24.95.

IN THE FOOTSTEPS OF ALEXANDER THE GREAT by Michael Wood. 256 pages. University of California Press, Berkeley, CA. 1997. \$27.50. Eric Hammel, a prolific military and aviation history writer, has produced another well-written, detailed book that concentrates on the first month of the Guadalcanal Campaign—from the 7 August 1942 invasion to the "carrier clash" on 24 August. The book is loaded with great charts (maps), order of battle and other hard-to-find details. Although Hammel describes the land and surface ship battles, his forte is his vivid depictions of the aerial dog fights during the invasion and the Battle of the Eastern Solomons.—LCDR John O'Donnell, USN, Honolulu, Hawaii

This memoir of a junior noncommissioned officer assigned to the 3d Squadron, 4th Cavalry Regiment, 25th Infantry Division posted to the Highway 1 area northwest of Saigon, Vietnam, during 1968, would be unexceptional but for its powerful, clear-eyed depiction of poor unit cohesion, disciplinary problems and ineffectual leadership. If anything, this book identifies the ramifications, on an individual level, of a conscript-based army experiencing tactical stalemate and defeats, without support on the home-front, in a war seemingly without reachable objectives. Overall, this book is an inadvertent portrait of why quality troops and tough training breed mission accomplishment.—CPT Jeff Kojac, USMC, Marine Air Control Squadron 7, Yuma, Arizona

Michael Wood provides an excellent companion piece to the works of Arrian, Curtius and Diodorus on the rise of Hellenistic civilization. The book is written in the travelogue style as Wood retraces Alexander III of Macedonia's route in his conquest of the Persian Empire and his advance into the Indian subcontinent in search of the ocean-sea. Through this narrative, Wood provides the reader with new insight into Alexander's travels and the difficulties he and his army faced as they marched over most of southwest Asia. Although wonderfully written and illustrated, this is not a stand-alone book for those who are not initiates of this period of history. Another disappointment is its complete lack of mention of Alexander's use of military art during the campaign.—MAJ David M. Link, USA, OPM-SANG, Riyadh, Saudi Arabia

components in early nuclear research, was principally used as a moderator for the primitive atomic piles scientists assembled in attempts to prove a self-sustaining chain reaction was even possible.

American scientists, working on the Manhattan Project, used lead as a moderator. A critical calculation error led German scientists to the faulty conclusion that lead would not work. Therefore, the Germans believed heavy water was the only effective moderator.

The Norsk Hydro plant was the major producer of heavy water in Europe. When the Germans invaded Norway in early 1940, they seized the plant. Allied leaders then decided that the plant and the existing stocks of heavy water had to be destroyed—"at any cost in blood or money."

Heavy water was not easy to produce. Through a painstaking, time-consuming electrolysis process, 100,000 gallons of ordinary water yielded only one gallon of heavy water. From the time the Germans seized the plant to the summer of 1942, Norsk Hydro delivered only 1,760 pounds of water—roughly one-sixth of the five tons estimated to be needed.

After four distinct tries, the Allies finally disabled the plant and destroyed existing stock. In the first attempt, Operation *Freshman*, the Allies attempted to insert two gliders carrying British commandos into the area. Both gliders missed their landing zones and crashed. The survivors were captured and executed—being among the first victims of Hitler's infamous "Commando Order."

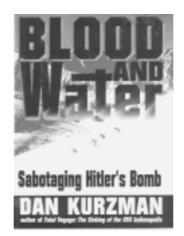
In the second attempt, Operation *Gumnerside*, a small team of Norwegian commandos, trained by the British Special Operations Executive, made a daring night-time assault on the plant and blew up the hydrolysis machinery and the existing heavy water. Miraculously, all the commandos managed to escape on skis.

Despite the brilliant success of *Gunnerside*, Norsk Hydro was back in operation several months later. In November 1943, the US Eighth Air Force hit Norsk Hydro with 174 heavy bombers. Although the raid did serious damage to the factory as a whole and killed 22 Norwegian civilians, the heavy water section was untouched.

As a result of the raids, the Ger-

mans ordered the transfer of the remaining heavy water stock to Germany. On 20 February 1944, several of the *Gunnerside* commandos who had remained in Norway blew up the ferry carrying the heavy water across Lake Timm on its way to Germany. The heavy water canisters sank in the deepest part of the lake and with them, Adolf Hitler's last hope of developing nuclear weapons.

Blood and Water is a thoroughly researched and documented history book that reads like a thriller. Kurzman's



fluid writing style makes the book difficult to put down. Perhaps the greatest value for today's soldiers is Kurzman's penetrating study and individual profiles of the commandos who executed these incredible missions.

The *Gunnerside* operation is a wonderful case study of an intricate and extremely difficult special operation planned and executed with clockwork precision. The soldiers who carried it off were no Hollywood "Rambos." They were highly trained and motivated professionals. This book is a must for anyone interested in special operations.

COL David T. Zabecki, USAR, 7th Army Reserve Command, Heidelberg, Germany

FOR CAUSE & COMRADES: Why Men Fought in the Civil War by James M. McPherson, 237 pages. Oxford University Press, New York, 1997. \$25.00.

For Cause & Comrades looks at the reasons why soldiers of both sides were motivated to enlist, remain and fight during one of America's bloodiest wars. James M. McPherson works within a broad framework of three distinct categories—initial motivation, sustaining motivation and combat motivation. The first con-

sists of the reasons why men enlisted; the second addresses factors—of which there are many—that kept men in the army and, equally important, kept the army in existence; the third focuses on what created in men the ability to not only go into combat for the first time but what *kept* them going into battle time after time, in some cases for four years.

As the statistical basis for his conclusions, McPherson uses soldiers' original diaries and personal letters, not official regimental histories, memoirs, newspaper letters or any items that were initially intended for publication. Why? He believes such works "suffer from a critical defect: they were written for publication." Diaries and personal letters come as close as possible to conveying true feelings and events and, more important, address soldiers' emotions and motivations, which is at this book's heart. McPherson states, "Having read at least 25,000 personal letters . . . from soldiers and 249 diaries, I am convinced that these documents bring us closer to the real thoughts and emotions of those men more than any other kind of surviving evidence." Lest it be thought the author's methods make for an unreliable data base for scholarly conclusions, he provides a statistical comparison between his samples and those of the two armies, specifically geographical and professional occupations and backgrounds, found in official records. The two are remarkably similar.

The author not only portrays his conclusions in a thought-provoking manner to discover Civil War soldiers' motivations, throughout the book he intersperses comparisons with modern conflicts. While not his work's central theme, these partial conclusions are as important for scholars as for the Civil War reader. Whether the statement, "You couldn't get American soldiers today to make an attack like that," which is attributed to General John Wickham after he visited the Antietam battlefield in the 1980s, is true or not, reading this work will get the military professional thinking about what motivates soldiers to serve and make sacrifices on the scale of those of our Civil War ancestors.

MAJ Richard D. Koethe III, USA, 3410th Strategic Military Intelligence Production Detachment, Millington, Tennessee

#### **US ARMY CADET COMMAND:**

The Ten Year History by Arthur T. Coumbe and Lee S. Harford. 358 pages. Office of the Command Historian, US Army Cadet Command, Fort Monroe, VA. 1996. \$10.00.

The US Army Cadet Command, formed in April 1986, assumed responsibility for over 300 Reserve Officer's Training Corps (ROTC) units, four regional headquarters and the Junior ROTC program in over 800 high schools. The new command also inherited many problems—officer production was not meeting Army requirements, on-campus and summer training was suspect and key Army staff elements opposed the command's formation

US Army Cadet Command describes the command's progress during the following decade. The most important development was the reforms Major General Robert E. Wagner, Cadet Command's first commander, instituted. Wagner tightened training requirements, intensified recruiting and infused the new command with enthusiasm and purpose. His successors continued his efforts, resulting in a substantial

improvement in this vital officer commissioning program.

Without dimming the Wagner era's luster, Arthur T. Coumbe and Lee S. Harford also show how budget and strength limitations since Operation Desert Storm have limited—perhaps reversed—further ROTC improvements. Unit and summer camp staffing is at the lowest level in years, and funds for scholarships and recruiting activities have been reduced. One pre-Cadet Command initiative—adding hundreds of "extension centers" to regular ROTC units—has spread a smaller ROTC cadre across an unwieldy number of host schools, many of which produce few officers. Meanwhile, closing unproductive units has proven time-consuming and diffi-

This excellent book provides a brief history of Army ROTC and describes the setting for the organizational changes that followed Cadet Command's formation. In view of ROTC's many problems and 1960s and 1970s campus turmoil, one is tempted to ask why it took the Army so long to deal with the problem.

Coumbe and Harford also include a chapter on the Army's Junior ROTC program, now active in over 1,200 high schools. Little has been written on Junior ROTC, and the authors' analysis is quite informative. Their conclusion, that Junior ROTC is performing exceptionally well and faces few problems somewhat in contrast to the college program—does raise a question: should the staffing approach used in Junior ROTC programs; that is, having a staff composed of selected military retirees, be considered for the senior program?

This book is a top-notch unit history. It provides the context for the command's activities as well as a careful assessment of the reform efforts that began in 1986. Coumbe and Harford are to be congratulated on their outstanding contribution to a better understanding of one of the Army's small but vital training efforts. The book will certainly receive careful attention in Cadet Command, but it clearly deserves much wider reading in Army circles.

COL William P. Snyder, USA, Retired, Pittsboro, North Carolina